



PÉCS: STRAW AND WOOD TO REDUCE CARBON FOOTPRINT

ONE OF THE FEW EUROPEAN CITIES USING RUNNING ON 100% RENEWABLE RESOURCES FOR ITS HEATING

Relying on local and renewable energy resources is one of the great achievements of the city of Pécs.

In November 2013, the largest biomass cogeneration heating network in Europe started operating: 180,000 metric tons of straw and 400,000 metric tons of wood now power every year the city's heating network and prevent the release of 400,000 metric tons of CO₂ into the atmosphere yearly.

INNOVATIONS

- ▶ Pécs is one of the only cities in Europe making use of 100% local, renewable resources for its heating needs. Operated by Veolia Hungary, the 35 MW electricity production unit using straw supplements complements another 50 MW electricity production unit which has been running on wood since 2004.
- ▶ In fact, the Pécs production unit represents 210 million m³ of natural gas saved per year and gives the city a true energy independence thanks to the use of local and renewable resources.

KEY DATA

- The Pécs heating biomass boiler feeds over 31,000 housing equivalents and some 450 public buildings.
- This production unit allows Hungary to save 210 million m³ of imported gas and prevents the release of 400,000 metric tons of CO₂ into the atmosphere, the equivalent of the yearly emissions of 27,000 French people.

STAKEHOLDERS

- ▶ The City of Pécs (170 000 inhabitants), the fifth largest city of Hungary
- ▶ Veolia

IMPLEMENTATION

- ▶ **2004** : Starting date of a 50MW production unit using wood.
- ▶ **2013** : Starting date of a new cogeneration unit producing 35MW fed by 180,000 metric tons of straw.
- ▶ Duration of the contract between Veolia and the Pécs municipality: 2008-2030 (22 years).

Zsolt Páva, the mayor of Pécs

“ I am delighted that this project allows Hungary to improve its performance in term of energy efficiency **”**

Renaud Capris,
country Manager of Veolia Hungary

“ It is extremely rare, if not unique, to have these two types of resources on the same site. For the Hungarian population and its elected officials, it is very reassuring to be able to rely on energy resources that significantly reduce their energy dependence and make it possible to create a considerable number of jobs that cannot be relocated. **”**

RESULTS

/// Environnemental results

Supply from 2 cogeneration units solely running on straw and wood (replacing gas and coal). Using renewable energy, decreasing CO₂ emissions, optimizing energy consumption via the heating network.

/// Social/Societal results

Over 170 jobs created locally to manage the straw-fueled plant's entire procurement channel.

/// Technical results

For the 180,000 metric tons of straw a year, the plant has a storage area for the raw material. The boiler is powered by 4 automatic lines: the straw bales arrive via a conveyor belt before being shredded and injected into the boiler.

FINANCIAL ASPECT OF THE OPERATION

/// Reinforcement of the local economy, decrease of energy dependence (gas importation).

→ A 80 M€ investment to switch from gas to straw.

